

STUDIES OF THE BYRON BOG IN SOUTHWESTERN ONTARIO XLVI. GROUND BEETLES (CARABIDAE) FROM THE DAMP, WOODED ZONE OF THE BOG¹

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In the description of the Byron Bog at London, Ontario (Judd, 1957), it is pointed out that there are in it three zones, designated as A, B, and C. Zone A is the central floating bog, Zone B is a low, wooded region, damp or flooded for most of the year, and Zone C comprises dry slopes occupied by trees and shrubs.

Zone B includes the greatest diversity of plants, e.g. twelve species of shrubs and vines (Judd, 1966) forming an undergrowth beneath the trees. There is consequently an abundance of rotting logs and stumps which litter the region and which, in turn, support the growth of several species of fungi which live on the rotting wood (Judd, 1968). The combination of damp conditions, decaying vegetation and readily available shelter thus renders Zone B of the bog an ideal habitat for many species of beetles, particularly Carabidae.

During the progress of other studies in the bog, collections of carabid beetles have been made in Zone B. They were found by looking under logs, stumps and other organic debris. As will be seen in the following account, most of the species represented are ones that regularly occur in the proximity of water or under damp conditions. The specimens captured were all pinned and labelled. They were identified by Dr. G. E. Ball, Department of Entomology, University of Alberta and are deposited in the collection of the Department of Zoology, University of Western Ontario.

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Pterostichus corvinus Dejean. September 25, 1969—4 beetles; December 3, 1970—1 beetle. Blatchley (1910) records that this species is found about the margins of lakes and Chagnon and Robert (1962) record it from Quebec.

Pterostichus luctuosus Dejean: September 29, 1968—2 beetles; December 3, 1970—3 beetles. Blatchley (1910) records that this species is found beneath rubbish, usually near water, and Chagnon and Robert (1962) record it from Quebec.

Pterostichus adstrictus Esch.: September 28, 1968—6 beetles; August 7, 1969—1 beetle. Ball (1968) records that this is a holarctic species and one of the commonest in the Boreal forest.

Pterostichus stygicus Say: August 7, 1969—2 beetles; September 25, 1969—1 beetle. Blatchley (1910) records that this species is very common beneath logs in open woods and Chagnon and Robert (1962) record it from Quebec.

Pterostichus patruelis Dejean: December 5, 1970—3 beetles. Ball (1968) records that this species occurs in moss. Blatchley (1910) records it from Indiana and Chagnon and Robert (1962) record it from Quebec.

Calathus gregarius Say: September 28, 1968—1 beetle. Blatchley (1910) records that this is a common species which is gregarious in cold weather.

Agonum thoreyi Dejean: August 7, 1969—1 beetle; December 3, 1970—3 beetles; December 5, 1970—6 beetles. This species was formerly designated as *Platynus picipennis* Kirby (Chagnon and Robert, 1962; Dillon and Dillon, 1961). Blatchley (1910) records it as being common and gregarious in winter.

Agonum melanarium Dejean: September 29, 1968—1 beetle; August 7, 1969—18 beetles; September 25, 1969—1 beetle; December 3, 1970—1 beetle; December 5, 1970—2 beetles. This species was formerly designated as *Platynus melanarius* Dejean (Chagnon and Robert, 1962; Dillon and Dillon, 1961). Blatchley (1910) records that it is a common beetle that hibernates.

Agonum trigeminum Lindroth: August 7, 1969—1 beetle. This was described as a new species by Lindroth (1954) who points out that it is very hygrophilus, being found at the margins of eutrophic ponds and pools with dense vegetation.

Agonum tenue LeConte: August 7, 1969—1 beetle. This species was previously designated as *Platynus tenuis* LeC. (Blatchley, 1910;

Chagnon and Robert, 1962). Blatchley (1910) records that it is a rare species and Chagnon and Robert (1962) record it from Quebec.

Anisodactylus kirbyi Lindroth: August 7, 1969—1 beetle. This species was given its name by Lindroth (1954) who designated specimens from Nova Scotia as holotypes deposited in the Canadian National Collection (deRuelle, 1970).

Anisodactylus interstitialis Say: September 29, 1968—1 beetle; December 3, 1970—9 beetles; December 5, 1970—1 beetle. Blatchley (1910) records this as a common beetle and Chagnon and Robert (1962) record it from Quebec.

Chlaenius impunctifrons Say: August 7, 1969: 1 beetle. Ball (1968) and Dillon and Dillon (1961) record this as a North American species. Blatchley (1910) records it from Indiana and Chagnon and Robert (1962) from Quebec.

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- 2.0118. Studies of the Byron Bog in southwestern Ontario XLVI. Ground beetles (Carabidae) from the damp, wooded zone of the bog.
- ABSTRACT.—Thirteen species in the genera *Pterostichus*, *Calathus*, *Agonum*, *Anisodactylus* and *Chlaenius* were collected from beneath shelters in the damp, wooded zone of the bog. W. W. JUDD Department of Zoology, University of Western Ontario, London, Ontario, Canada.

Descriptors: Coleoptera; Carabidae; Byron Bog, Ontario, Canada, Carabidae.